

section, including location, depth, date drilled, and record of plugging and/or completion.

(3) Operating data:

(i) Maximum and average injection rate;

(ii) Maximum and average injection pressure;

(iii) Whether operation is on cyclic or continuous operation basis; and

(iv) Source and appropriate analysis of injected fluids, including total dissolved solids, chlorides, and additives.

(4) Geologic data on the injection and confining zones, including faults, geological name, thickness permeability, depth and lithologic description.

(5) Depth to base of fresh water.

(6) Schematic drawings of the surface and subsurface details of the well, showing:

(i) Total depth or plug-back depth;

(ii) Depth to top and bottom of injection interval;

(iii) Depths to tops and bottoms of casing and cemented intervals, and amount of cement to be used;

(iv) Size of casing and tubing, and depth of packer; and

(v) Hole diameter.

(7) Proof that surety bond has been filed with the BIA Superintendent in accordance with 25 CFR 226.6. A surety bond must be maintained until the well has been properly plugged.

(8) Verification of public notice, consisting of a list showing the names, addresses, and date that notice of permit application was given or sent to:

(i) The surface land owner;

(ii) Tenants on land where injection well is located or proposed to be located; and

(iii) Each operator of a producing lease within one-half mile of the well location.

(9) All available logging and testing data on the well (for existing wells, i.e., wells to be converted or wells previously authorized by rule).

(Approved by the Office of Management and Budget under control number 2040-0042)

§ 147.2919 Construction requirements for wells authorized by permit.

(a) All Class II wells shall be sited so that they inject into a formation that is separated from any USDW by a con-

fining zone free of known open faults or fractures within the area of review.

(b) All Class II wells shall be cased and cemented to prevent movement of fluids into or between USDWs. Requirements shall be based on the depth to base of fresh water, and the depth to the injection zone. Newly drilled Class II wells must have surface casing set and cemented to at least 50 feet below the base of fresh water, or the equivalent (e.g., long string cemented to surface). At the Regional Administrator's discretion, the casing and cementing of wells to be converted may be considered adequate if they meet the BIA requirements that were in effect at the time of construction (completion), and will not result in movement of fluid into a USDW.

(c) Owner/operators shall provide a standard female fitting with cut-off valves, connected to the tubing and the tubing/casing annulus so that the injection pressure and annulus pressure may be measured by an EPA representative by attaching a gauge having a standard male fitting.

(d) No owner or operator may begin construction of a new well until a permit authorizing such construction has been issued, unless such construction is otherwise authorized by an area permit.

§ 147.2920 Operating requirements for wells authorized by permit.

(a) For new Class II wells, injection shall be through adequate tubing and packer. Packer shall be run on the tubing and set inside the casing within 75 feet of the top of the injection interval. For existing Class II, wells, injection shall be through adequate tubing and packer, or according to alternative operating requirements approved by the Regional Administrator, as necessary to prevent the movement of fluid into a USDW.

(b) Each well must have mechanical integrity. Mechanical integrity of the injection well must be shown prior to operation. The owner/operator must notify the Osage UIC office at least five days prior to mechanical integrity testing. Conditions of both paragraphs (b) (1) and (2) of this section must be met.